What is Claimed is:

1. A method for communicating data over a power line, comprising:

receiving a signal from a first portion of the power line;

converting at least a portion of the signal to a non-electrically conducting signal; and

communicating the non-electrically conducting signal to a non-electrically conductive communication path.

2. The method as recited in claim 1, wherein the signal comprises a data component and a power component.

3. The method as recited in claim 2, wherein the power component comprises a low frequency signal and the data component comprises a high frequency signal.

4. The method as recited in claim 2, further comprising filtering the power component from the data component.

5. The method as recited in claim 4, wherein the filtering comprises inductively filtering the power component from the data component.

6. The method as recited in claim 4, wherein the filtering comprises capacitively filtering the power component from the data component.

7. The method as recited in claim 4, wherein the filtering comprises digitally filtering the power component from the data component.

8. The method as recited in claim 2, wherein converting comprises converting the data component of the signal to a non-electrically conducting signal.

9. The method as recited in claim 2, further comprising preventing, substantially, the power component of the signal from communicating with the non-electrically conductive communication path.

10. The method as recited in claim 1, wherein the non-electrically conductive communication path is a second portion of the power line.

11. The method as recited in claim 10, wherein the second portion of the power line carries a lower voltage than the first portion of the power line.

12. The method as recited in claim 1, wherein the non-electrically conducting signal is a light signal.

13. The method as recited in claim 12, wherein communicating comprises communicating the light signal to a light transmissive and electrically non-conductive communication path.

14. The method as recited in claim 12, wherein communicating comprises communicating the light signal to an optic fiber.

15. The method as recited in claim 12, wherein communicating comprises communicating the light signal to a light pipe.

16. The method as recited in claim 1, wherein the non-electrically conducting signal is a radio frequency signal.

17. The method as recited in claim 16, wherein communicating comprises communicating the radio frequency signal to a radio frequency transmissive and electrically non-conductive communication path.

18. The method as recited in claim 17 wherein the radio frequency transmissive and electrically non-conductive communication path comprises air.

19. The method as recited in claim 1, wherein the receiving the signal comprises inductively receiving the signal from the first portion of the power line.

20. The method as recited in claim 1, further comprising demodulating the signal.

21. The method as recited in claim 20, further comprising routing the demodulated signal.

22. The method as recited in claim 1, further comprising receiving the non-electrically conducting signal.

23. The method as recited in claim 22, further comprising converting the non-electrically conducting signal to an electrically conducting signal for communication to a second communication path.

24. The method as recited in claim 23, further comprising communicating the electrically conducting signal to a second portion of the power line.

25. The method as recited in claim 24, further comprising communicating the electrically conducting signal to a telephone line.

26. The method as recited in claim 22, further comprising converting the non-electrically conducting signal to a radio frequency signal for communication to a second communication path.

27. The method as recited in claim 26, further comprising communicating the radio frequency signal to air.

28. An apparatus for communicating data over a power line, the apparatus comprising:

a coupling device that receives a signal from the power line; and

a signal conversion device in communication with the coupling device that converts the signal to a non-electrically conducting signal.

29. The apparatus as recited in claim 28, wherein the coupling device comprises an inductor.

30. The apparatus as recited in claim 29, wherein the inductor comprises a toroidally shaped coil.

31. The apparatus as recited in claim 30, wherein the inductor further comprises a toroidally shaped core of magnetically permeable material.

32. The apparatus as recited in claim 31, wherein the inductor further comprises a dielectric material disposed proximate the core.

33. The apparatus as recited in claim 29, wherein the inductor is hinged for mechanical attachment to the power line.

34. The apparatus as recited in claim 28, wherein the signal conversion device comprises an optoelectronic transceiver.

35. The apparatus as recited in claim 28, wherein the signal conversion device comprise a one of a light-emitting diode, a laser, a vertical cavity surface emitting laser, a photosensitive diode, and a photosensitive transistor.

36. The apparatus as recited in claim 28, wherein the signal comprises a power component and a data component and the apparatus further comprises a filtering device in communication with the coupling device that filters the power component from the data component.

37. The apparatus as recited in claim 36, wherein the filtering device comprises a capacitor.

38. The apparatus as recited in claim 28, further comprising a power supply having a power input and a power output, the power input for electrically coupling to the power line and the power output electrically coupled to the signal conversion device.

39. The apparatus as recited in claim 38, wherein the power supply comprises a toroidally shaped coil having a magnetically permeable core for electrical coupling to the power line.

40. The apparatus as recited in claim 28, further comprising a non-electrically conductive communication path.

41. The apparatus as recited in claim 38, wherein the communication path comprises an optically transmissive and electrically non-conductive path.

42. The apparatus as recited in claim 38, wherein the communication path comprises a light pipe.

43. The apparatus as recited in claim 38, wherein the communication path comprises an optic fiber.

44. The apparatus as recited in claim 28, further comprising a weather-tight housing containing at least a portion of the signal conversion device.

45. A system for communicating data over a power line, the system comprising:

a coupling device that receives a signal from the power line;

a signal conversion device in communication with the coupling device that converts the signal to a non-electrically conducting signal; and

a communication interface device that receives the non-electrically conducting signal.

46. The system as recited in claim 45, wherein the communication interface device comprises a modem.

47. The system as recited in claim 46, further comprising a data router in communication with the modem.

48. The system as recited in claim 45, wherein the communication interface device comprises:

a second signal conversion device that receives the non-electrically conducting signal and converts the received signal for communication over a communication path; and

a second coupling device in communication with the second signal conversion device that communicates the converted signal to the communication path.

49. The system as recited in claim 48, wherein the communication path is a second power line.

50. The system as recited in claim 48, wherein the communication path is a telephone line.

51. The system as recited in claim 48, wherein the communication path is a wireless communication link.

52. The system as recited in claim 45, wherein the second coupling device comprises a toroidally shaped inductor.

53. The system as recited in claim 45, wherein the second coupling device comprises a tap.

54. The system as recited in claim 45, wherein the second coupling device comprises a capacitor.

55. The system as recited in claim 45, wherein the second signal conversion device comprises an optoelectronic transceiver.

56. The system as recited in claim 45, wherein the second signal conversion device comprises at least one of a light-emitting diode, a laser, a vertical cavity surface emitting laser, a photosensitive diode, and a photosensitive transistor.

57. The system as recited in claim 45, wherein the second signal conversion device comprises a radio frequency transceiver.

58. A method for communicating data over a power line, comprising:
receiving a data signal from the power line to a data communication path; and
preventing, substantially, power from flowing through the data communication path.

59. A method for communicating data over a power line, comprising:

providing a data communication path in communication with the power line; and

allowing data signals to flow through the data communication path and not allowing power flow through the communication path.

60. A method for communicating data over a power line, comprising:

receiving a signal from the power line; and

converting at least a portion of the signal to a signal having properties that do not provide imminent danger from human contact.